

REMARKS

Claims 1-3, 5, 6, 12, 13, and 29-33 were examined and rejected. The substance of the rejection is the same as in the previous action, except with the addition of Lan. None of the claims is currently amended. Reconsideration is requested.

The presently claimed invention distinguishes the cited combination of references because direct signal layer interconnection is used in conjunction with shielding of individual traces inside the PCB. Close proximity between unshielded, high frequency signal traces can result in undesirable cross-talk. The presently claimed invention includes a technique whereby shielding of individual traces or differential pairs **from one-another** inside the PCB can be used in conjunction with direct signal layer interconnection in order to help avoid those problems and thereby enable use of higher frequency signals. The Office contends that the recited shielding is taught by Lan at col. 7, lines 20-30. Applicant respectfully traverses. The cited passage of Lan teaches a shielding that fails to shield the signal traces from one-another. Lan's Figs. 2B and 2E, for example, show signal traces (220) side-by-side **without intervening shielding**. Presumably, the Lan shielding is protective of the signal traces **as a group** against EMI coming from outside the chip package. While shielding of wiring and entire devices such as chip packages is well known, shielding **around (i.e., not just on two sides) individual traces and differential pairs on an inner layer** is not taught in the cited combination. Compare, for example, the conduit-like shielding formed by connecting ground platings (84, 86, 88, 90) around differential pair traces (80, 82) in Fig. 9 of this application with the array of about twenty signal traces (220) which are unshielded relative to one another in Fig. 2B of Lan. Claim 1 therefore distinguishes the cited combination by reciting "shielding disposed **around** the at least **one signal trace**." (emphasis

added) Withdrawal of the rejections of claims 1-3, 5, 6, 12, 13, and 29-33 based on Dickirson and Khandros is therefore requested.

For the reasons stated above, this application including all claims currently under examination is now considered to be in condition for allowance and such action is earnestly solicited. Should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Applicants' Attorney at 978-264-4001 (x305) so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

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Date

/Holmes W. Anderson/
Holmes W. Anderson, Reg. No. 37,272
Attorney/Agent for Applicant(s)
McGuinness & Manaras LLP
125 Nagog Park
Acton, MA 01720
(978) 264-6664

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